

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of claims:

1. (Previously Presented) A method for triggering by means of a digital processing device, at least one action on digital communication data when they belong to one and the same semantic flow for which said action is designed, wherein the method comprises:

feeding the device with at least one filter having three possible states which result from one or more conditions on one or more protocol attributes specified for said semantic flow,

a valid state corresponding to protocol attribute values which confirm that said condition or conditions are satisfied,

an invalid state corresponding to protocol attribute values which confirm that said condition or conditions are not satisfied,

an uncertain state corresponding to an absence of protocol attribute values to confirm that said condition or conditions are or are not satisfied,

each protocol attribute being specified by an ordered sequence of protocol names used in the semantic flow and by a parameter name conveyed by a protocol whose name is indicated in said ordered sequence of protocol names;

applying the three-state filter to said communication data as long as these data have not afforded protocol attribute values other than those from which said uncertain state of the filter results; and

triggering said action when said valid state of the filter results from protocol attribute values afforded by the communication data.

2. (Previously Presented) The method as claimed in claim 1, wherein to apply the filter to said communication data, the method further comprises:

dispatching one of said protocol attributes to a protocol interface allocated to the protocol indicated in the ordered sequence of protocol names, until the state of the filter is valid or invalid or until all the protocol attributes have been dispatched;

searching through the communication data for the value of the specified parameter and transmitting this value to the digital processing device if it finds the former; and

evaluating the state of the filter which corresponds to the value or to the absence of value transmitted by the protocol interface.

3. (Previously Presented) The method as claimed in claim 1, wherein each filter for feeding said digital processing device is defined by a logical combination of rules in a first table, each rule being defined in a second table by a verification expression comprising at least one comparison operator, an argument of which is the protocol attribute.

4. (Previously Presented) The method as claimed in claim 2, wherein to evaluate the state of the filter which corresponds to the value or to the absence of value transmitted by the protocol interface, the digital processing device evaluates the state of at least one rule in the logical combination as a function of the transmission of value and then the state given by the logical combination applied to the evaluated states of rules.

5. (Previously Presented) The method as claimed in claim 1 wherein the method further comprises a step in which the digital communication data are scanned so as to detect any change of value of a protocol attribute so as to make it possible to evaluate a change of state of the filter which corresponds to the change of value.

6. (Previously Presented) A computer system for triggering at least one action on digital communication data when they belong to one and the same semantic flow for which said action is designed, wherein the system comprises:

- a digital processing device comprising a filtering engine and an actions engine;
- a database for feeding the filtering engine with at least one filter having three possible states which result from one or more conditions on one or more protocol attributes specified for said semantic flow;
- at least one data structure for cataloguing
 - a valid state corresponding to protocol attribute values which confirm that said condition or conditions are satisfied,
 - an invalid state corresponding to protocol attribute values which confirm that said condition or conditions are not satisfied,
 - an uncertain state corresponding to an absence of protocol attribute values to confirm that said condition or conditions are or are not satisfied,
- each protocol attribute being specified by an ordered sequence of protocol names used in the semantic flow and by a parameter name conveyed by a protocol whose name is indicated in said ordered sequence of protocol names;
- means for receiving communication data, useable by the filtering engine to apply each necessary filter to said communication data as long as these data have not afforded any protocol attribute value other than those from which said uncertain state of the filter results; and
- means of transmission of the communication data, useable by the action engine to trigger said action when said valid state is contained in the data structure.

7. (Previously Presented) The computer system as claimed in claim 6, wherein the system comprises a protocol interface allocated to each useable protocol in the semantic flow, and configured to receive from the filtering engine, the protocol attributes defined for the protocol to which the protocol interface is allocated;

the protocol interface being configured so as to search through the communication data for the value of the specified parameter and to transmit this value to the filtering engine if it finds the former; and

the filtering engine being configured so as to evaluate the state of the filter which corresponds to the value or to the absence of value transmitted by the protocol interface.

8. (Previously Presented) The computer system as claimed in claim 6, wherein the database comprises a first table which contains a logical combination of rules for each filter, and a second table which contains for each rule, a verification expression comprising at least one comparison operator, an argument of which is the protocol attribute.

9. (Previously Presented) The computer system as claimed in claim 7, wherein to evaluate the state of the filter which corresponds to the value or to the absence of value transmitted by the protocol interface, the digital processing device is devised so as to evaluate the state of at least one rule in the logical combination as a function of the transmission of value and then the state given by the logical combination applied to the evaluated states of rules.

10. (Previously Presented) The computer system as claimed in claim 6, wherein the database comprises at least a third table containing several names of actions each designed for a different semantic flow with which a specific filter is associated.